

Aviation Facilities

There are two airports in Power County: American Falls and Pocatello Municipal. The Pocatello Municipal airport supports regularly scheduled commercial air service to Salt Lake City. The American Falls airport provides support for agricultural and private air operations.

Emergency Services

Law enforcement is provided by the Power County Sheriff throughout the county. Law enforcement is also provided within and by the municipalities of American Falls and Rockland. Ambulance services are located in American Falls and Rockland. Volunteer and Rural Fire Departments are located at and provide service to American Falls and Rockland. The U.S. Forest Service, IDL and BLM provide wildfire protection in much of Power County.

Hazard Identification, Location, Risk

Power County has been the site of numerous large wildfires over the past thirty years. The fuels, weather and topography in Power County combine to make wildfire an annual hazard with associated risks. The most recent large fires to impact Power County and its residents occurred in 2000. During the summer of 2000, a severe dry lightening storm passed through the county igniting several fires in the county and particularly within the Shoshone-Bannock reservation. The result was four major fires that eventually combined into a single Eastern Idaho Complex fire. Fires occurring in 2000 were:

- Moonshine Fire (greater than 30,000 acres)
- Rattle Snake Fire (2,318 acres)
- Fisher Creek Fire (greater than 37,000 acres)
- Green Canyon Fire (1,745 acres)
- Flat Top Fire (57,477 acres)

Also in 2000, but not part of the complex fire described above, was the Flat Top fire. This fire eventually burned over 55,000 acres of which 15,000 were in Power County. In 1996, the Cox Wells fire ignited in the northern portion of the county on Public land and eventually burned over 219,000 acres. Both fires were lightening caused.

Traditionally lightening causes 51% of the fires within Eastern Idaho and 49% are human caused¹¹. Additionally, there were numerous small fires started by farm equipment working in the fields. These fires were numerous in number, but small in size due to the inability of the farmed fields to carry a fire and because the farmers would extinguish the fires as quickly as they would start.

With the inclusion of previously farmed fields into the CRP program there has been fewer fires started by farm equipment. However, there is a growing concern with Power County residents that while the number of fires has gone down, the potential for larger,

¹¹ <http://www.fs.fed.us/r4/caribou-targhee/EIIFC/Data/Data/Statistics.htm>

more catastrophic fires has increased. This is due to the increased fuel load on CRP lands and the absence of farmers in the field to stop fires before they become large.

Map 2 in Appendix A depicts those areas that have burned over the past three decades. From the map it is clear that several areas have burned repeatedly during that time. Landscape scars from past intense large wildfires are obvious in much of the County. The vegetative recovery from many of these wildfires is ongoing and many of the burned areas have been converted to Cheatgrass and other invasive plant species.

Fires in the northern portion of the County traditionally burn in a southwest to northeast pattern in accordance with the prevailing wind patterns. In the Arbon and Rockland portions of the County there is no prevailing burn pattern as the valleys cause unpredictable wind vortex.

Wildfire Fuels in Power County

Fuels that contribute to wildfires in Power County range from sagebrush/grass to Pinion-Juniper, lodgepole pine evident at higher elevations or on north aspects. Sagebrush with a grass under story (including lands in CRP) is the major wildfire fuel near communities, homes or developments.

Fire exclusion and lack of mechanical treatment (thinning) have resulted in dense stands of sagebrush. Where fire has been present, the native grass and shrub species have been replaced with Cheatgrass or other invasive non-native species. These sagebrush, grass and weed areas provide available fuel for wildfire spread and increased intensity. Drought, combined with these vegetation types, provides additional dead vegetation to fuel future wildfires.

Farmland that has been placed in the Conservation Reserve Program (CRP) has shown significant increases in wildfire fuel loads. Because of restrictions on vegetation manipulation activities on CRP land fuel material has been allowed to accumulate for several years on these sites. The limitation of vegetation manipulation has also resulted in an invasion of non-native species on some CRP land.

Power County Weather

The wildfire season in Power County is June through September. The highest fire danger usually occurs in July and August. It is common to have numerous consecutive days of “Very High” to “Extreme” fire danger from July through September. Thunderstorms ignite most of the wildfires during the high fire danger periods, and can often start over 20 wildfires from one storm.

Drought

Recent concerns about the effects of climate change, particularly drought, are contributing to concerns about wildfire vulnerability. The term drought is applied to a period in which an unusual scarcity of rain causes a serious hydrological imbalance. Unusually dry winters, or significantly less rainfall than normal, can lead to relatively drier conditions, and leave reservoirs and water tables lower. Drought leads to problems

with irrigation, and may contribute to additional fires, or additional difficulties in fighting fires. However, most fuel types (not including grasses) require two or three years of drought before the fuel becomes dangerously dry.

Power County Topography

The varied topography of Power County, mountainous terrain, U shaped valleys, river drainages, level dry croplands will contribute to wildfire hazards (see Map 5 in Appendix A). The mountain ranges within the county run generally north-south. The vegetation types on these mountain ranges have historically been the source of numerous lightning caused wildfire. The topographical influence to the mountainous terrain and steep river drainages will increase wildfire rates of spread and intensity. Fire suppression in the mountainous areas or river drainages is difficult, long response times and access to the wildfires yields increased hazard to fire fighters and allows wildfires to grow in size.

Transportation corridors- roads, interstate highways, and railroads yield human caused wildfires that are often in the more rugged terrain of Power County. Human caused wildfires within Power County have historically occurred during times of High to Extreme fire danger, with the combination of high fire danger and rugged terrain with long travel distance and limited road access, the topographic influence on these fires will be the catalyst for larger and more hazardous wildfires.

Power County Wildland/Urban Interface (WUI)

Power County contains numerous developments that are in two of the three defined WUI categories. These categories are:

Classic Interface: An area where well-defined urban and suburban development press up against open expanses of wildland areas.

Mixed Interface: Isolated homes, subdivisions, and small communities situated predominantly in wildland settings

Occluded Interface: Characterized by islands of wildland vegetation occurring inside largely urbanized areas.

Most of Power County is in the mixed interface category, with the cities of American Falls and Rockland fitting the classic interface definition.

Map 6 in Appendix A depicts those areas that have known past urban-interface problems. They are areas where structures and values can and have been threatened by wildland fires and are of special concern to fire personnel and homeowners. Members of the wildland fire and VFD branches of the Power County Wildland Fire group jointly developed the map.

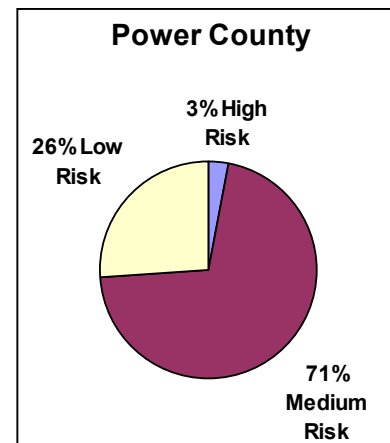
Hazard Location

The Bureau of Land Management's (BLM) Upper Snake River District (USRD) Geographic Information Systems (GIS) team and the GIS Training and Research Center (GISTReC) at Idaho State University (ISU), have created a model to predict potential wildfire risk areas for Power County, Idaho. During this project models were created of

specific individual risks associated with wildfires: topography, vegetation moisture, fuel load, and the number of structures at risk¹². The Bureau of Land Management funded this modeling effort. Based on that model the majority of the area within Power County is classified as a medium risk for wildland fires.

A copy of the ISU report accompanies this plan and is incorporated by reference. The areas within Power County that are at highest hazard from wildfire as identified by the ISU modeling effort can be found in Map 7 in Appendix A.

Combined with the ISU hazard model was a digitized representation of areas in the Natural Resources Conservation Services' Conservation Reserve Program (CRP). Responding to comments received from the public, areas under CRP contract were considered as high hazard areas.



Other Hazard Issues

The interface areas within Power County are characterized by a diverse mixture of varying housing structures, development patterns, ornamental and natural vegetation and natural fuels. In the event of a wildfire, vegetation, structures and other flammables can merge with unpredictable results. Reviewing past WUI fires shows that most property is destroyed or damaged for one or more of the following reasons:

- Combustible roofing material;
- Wood construction;
- Structures with no defensible space;
- Fire departments with poor or limited road access to structures;
- Developments located in heavy natural fuel types;
- Structure/properties located on steep slopes covered with flammable vegetation;
- Limited water supply.

Power County exhibits all of these characteristics either throughout the county, or in some instances, within a very concentrated area. During every public meeting about this planning effort several of the issues identified above were echoed by the public.

Limited Road Access is a major issue for all emergency service providers within the County. As population trends and demands for housing increase, some developments exhibit less than adequate turn-around space for emergency vehicles. Some County communities and developments are challenged by steep narrow roadways, while others are served by bridges that have weight restrictions imposed, thereby eliminating various types of fire suppression resources as an option in protecting lives and properties.

¹² Gentry, Chad and Jeff Frank. 2003. Wildland/Urban Interface and Communities at Risk: Joint Fire Modeling Project for Power County, Idaho Bureau of Land Management, Upper Snake River District GIS And Idaho State University GIS Training and Research Center. pp 30.

Limited Water Supply in remote developments and communities within the County continue to hamper suppression operations in the interface. Wildland areas continue to rely on the natural water sources within the county, but those areas that are co-mingled with private ownership face characteristically inadequate water systems and lack of hydrants. Additionally, concern was expressed about emergency power supply to critical water sources as power supply tends to be easily disrupted when wildland fires occur.

Communications in the Arbon and Rockland valleys is poor to non-existent. Past radio coverage has become too expensive to operate or does not reach the right people or a sufficient number of people to be effective.

Home location and condition within the County was raised at each of the public meetings. There is no good inventory regarding the location of homes within the County and the conditions and resources available at each home to assist in wildland fire suppression or help in planning fire suppression priorities.

Time to respond for volunteer fire departments is poor in the outlying areas. This is due in part to the location of firefighting equipment and also in part to the multiple, but limited, coverage in the County of the fire protection districts. Currently, much of the County is not covered by any fire protection districts. The diversity, location and amount of fire fighting equipment, as well as the number of personnel within each of the VFDs are substantially different between the major communities and developments.

During 2003, the Three Rivers Resources Conservation and Development (RC&D) organization surveyed the fire departments in eastern Idaho for fire department needs and weaknesses. These include American Falls Fire District and the Rockland Fire District. A copy of the RC&D report¹³ accompanies this plan and is incorporated by reference. The results of that survey indicate the following needs within the fire suppression organizations within Power County:

FIREFIGHTER PROGRAM	
● Fire Stations	
○ New Station = 1	
○ Classroom/Training Space = 1	
○ Office Space = 1	
● Personnel = 1	
● Testing Equipment	
○ Current NFPA Testing Manuals & Workbooks = 1	
● Small, More Maneuverable Apparatus = 1	
● Grant Related Needs	
○ Grant Funding = 1	
○ Grant Writer = 1	
○ Assistant with Grant Process = 1	

¹³ Three Rivers Resource, Conservation & Development Area. June 2003. Composite Report, Power County Fire Departments & Districts. pp. 4

- Grant Resource Library Specific to EMS/Fire = 1
- Grant Writing Course = 1
- Improved Records Management System = 2
- Computerization
 - Desk Top Computer = 2
 - Computer/Software Training = 2
 - Software = 2
- Road Maintenance/Improvement/Access/Code Issues = 2

TRAINING AND CERTIFICATIONS

- Training Aids: Videos, Slides, Table Top Simulators = 2
- Low-cost Training Opportunities = 1
- Computer-based Training/CD's = 2
- Power Point Software = 1
- IFSTA Training Program = 1

COMMUNICATIONS

- Hand-held Radios = 1
- Portable Radios = 1
- Vehicle Radios = 1
- Upgrade Multi-frequency Capabilities = 2
- GPS Units = 1

PREVENTION AND INSPECTION

- Fire Cause and Origin Investigations Training= 1
- Investigations Administrative Support = 1

PUBLIC EDUCATION

- Pre-packaged Presentation/Instructional Materials = 1
- Handout Materials = 1
- Personnel = 1

Values at Risk

Values at risk to wildfire in Power County includes privately owned homes and property, County assets (buildings, communication sites, road/highway stabilization or repair), soil stability concerns, critical wildlife winter ranges, recreational activities and tourism, and

the safety of residents, visitors, and fire fighters in the fuel types, conditions and rugged terrain of Power County. The county currently has over 2,513 homes and other property valued at more than \$127 million.

In addition to the homes at risk to wildland fire, there are 2,863 parcels of farmland in Power County valued at more than \$91 million. These figures do not include the millions of dollars in livestock and other personal assets that are at risk to wildland fire. Light industry assets in the northern portion of the county are also at risk and include the Simplot potato processing facility in the northeast corner of the county. These assets are valued in the multi-millions of dollars and are significant to the tax base of Power County.

Three highway transportation corridors, Interstate Highway 86 and State Highways 37 and 39 are vulnerable to wildfire and have been closed to traffic because of wildfires. Bureau of Land Management and U.S. Forest Service roads have been closed on numerous occasions because of wildfires. Wood power poles and power lines are at risk in a wild land fire situation. Not only does a fire have the potential to ignite wood poles, there is the possibility of Carbon pathing and power interruption. Power outages on transmission lines can have a catastrophic effect on people in the whole Western United States. In 1997, wildland fires in Eastern Idaho knocked out power to multiple states and millions of customers. Finally, the Pocatello airport is vulnerable to disruption of services either from direct threats from wildland fires or from indirect threats such as poor visibility due to smoke from wildland fires.

Federal, State and tribal agencies are the major landowners and provide wildfire protection for most of Power County. The major landowner wildfire protection is combined with protection areas provided by two Volunteer Fire Departments. Wildfire response-protection districts in Power County are provided on Map 8 of the Appendix A.

Hazard Prioritization

Based on the hazards discussion, the planning team constructed eleven different hazard statements that they believed fully encompassed the hazard discussions. The planning team then prioritized the hazard issues by rating each issue as having a High, Medium or Low impact on each of the three plan goals for 1) Protection of life, 2) Protection of property, and 3) Protection of resources. The following table shows the results of the rating process, with the issues sorted in priority order from most important to least important.

Issues	Life	Property	Resources	Total
Power County has a limited communication network with some portions of the county without any communication coverage at all.	H(5.00 ¹⁴)	H(5.00)	H(5.00)	15.00

¹⁴ The number next to the letter is the numeric value assigned to the letter (H=5, M=3, L=1) for calculating the priority.

Issues	Life	Property	Resources	Total
Power County has limited sources of water for fighting wildland fires and many of those sources are vulnerable to disruption of service in the event of a wildland fire.	H(5.00)	H(5.00)	H(5.00)	15.00
Power County has limited fire station locations and equipment that result in poor response times to fires in outlying portions of the county	H(5.00)	H(5.00)	M(3.00)	13.00
Power County is not fully covered by fire protection districts and the districts that are present in the county are not fully coordinated together.	M(3.00)	H(5.00)	M(3.00)	11.00
Power County has numerous county roads, infrastructure, communication sites, developments and communities that require hazardous fuels reduction.	M(3.00)	H(5.00)	M ¹⁵ (3.00)	11.00
Power County lacks defensible space and fire resistant building materials in some developments and at private homes.	H(5.00)	H(5.00)	L(1.00)	11.00
Power County volunteer fire departments are having difficulty meeting standards or requirements pertaining to: Training, PPE, Communications, Equipment, Apparatus and Facilities.	M ¹⁶ (3.00)	M(3.00)	M(3.00)	9.00
Power County citizens have had limited firewise education, information and awareness with regards to wildland fire.	M(3.00)	M(3.00)	M(3.00)	9.00
Power County Developments/subdivisions/homeowners are without emergency wildfire plans or other emergency plans in place.	M ¹⁷ (3.00)	M(3.00)	L(1.00)	7.00
Power County has a large amount of land in the CRP increasing fuel loads beyond what would normally occur on tilled farmland.	L(1.00)	M(3.00)	L(1.00)	5.00
Power County has no comprehensive inventory of homes and values at risk in the event of a wildland fire.	L ¹⁸ (1.00)	M(3.00)	L(1.00)	5.00

Mitigation Goals, Strategy and Implementation

Hazard prioritization and mitigation goals are in accordance with the stated objectives and priorities, specifically: Protection of Life, Property and Values at Risk. The mitigation goals were developed in response to the issues identified by the Power County Wildland Fire Mitigation Group and input from the public meetings. The list of mitigation goals responds directly to the hazards faced and the issues raised by the residents of Power County.

¹⁵ Fuel reduction activities may have a high impact on cultural values especially to the tribes.

¹⁶ The team believed that this issue could be rated either M or H.

¹⁷ There are a few locations that do have an emergency plan, but there is no countywide plan.

¹⁸ Inventories may make it easier for dispatch to manage multiple fire outbreaks.